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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/014,308

11/13/2001

Scott D. Leapman

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3163

7590 07/27/2007
GATEWAY, INC.
Attention: Kenneth J. Cool
610 Gateway Drive, MD Y-04
N. Sioux City, SD 57049

EXAMINER

BONSHOCK, DENNIS G

ART UNIT	PAPER NUMBER
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2173

MAIL DATE	DELIVERY MODE
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07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/014,308

Applicant(s)

LEAPMAN, SCOTT D.

Examiner

Dennis G. Bonshock

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-18, 20-27, 31, 34 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-18, 20-27, 31, 34 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Final Rejection

Response to Amendment

1. It is hereby acknowledged that the following papers have been received and placed on record in the file: Amendment as received on 5-16-2007.

2. Claims 1-35 have been examined.

Status of Claims:

3. Claims 1-6, 13, 15-18, 34, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheng, Patent Number: 5,956,022.

4. Claims 7, 20, 21, 23-27, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng and Kwon et al., Patent No.: US 7,043,691, hereafter Kwon.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng, Kwon, and Petty et al., Patent #6,546,263, hereinafter Petty.

6. Claims 8-12, 14, 19, 28-30, 32, and 33 have been cancelled by the applicant.

Information Disclosure Statement

7. The information disclosure statement filed 11-13-2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Specifically, no copy was provided for WO 99/63458.

Claim Objections

8. Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, claim 27 depends on claim 25 which teaches the identical limitation. It is believed that the Applicant meant for claim 27 to depend on independent claim 26, but further clarification is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-13, 15-18, 20, 21, 23-27, 34, and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. The term "highly probable (solution)", in claims 1, 13, 20, and 26, is a relative term which renders the claim indefinite. The term "highly probable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The terminology "highly probable" renders the solution indefinite.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 13, 15-18, 34, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheng, Patent Number: 5,956,022.

3. With regard to claim 1, which teaches a method, comprising: (a) detecting a fault condition in a signal-receiving connection on a display device, the signal-receiving connection being between the display device and a device capable of generating and transmitting a signal through the connection, Cheng teaches detecting various faults (see column 2, lines 35-37 and 43-45) in a device which receives signals at a monitor from a connection to a video graphic adapter at a computer (see column 2, lines 9-23). With regard to claim 1, which further teaches (b) determining a solution for correcting said fault condition in the signal-receiving connection on the display device, the solution being highly probable for correcting said fault condition in the connection, Cheng further teaches, in column 2, lines 35-62, the system determining a solution that is most appropriate to the recognized fault. With regard to claim 1, which further teaches (c) displaying on the display device a graphical depiction which illustrates said highly probable solution to said fault condition in the connection on the display device, Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps appropriate to the users fault to a user. With regard to claim 1,

which further teaches (d) detecting if said fault condition is present after displaying the graphical depiction of said highly probable solution, Cheng further teaches, in column 2, lines 60-62, the system determining if no more faults are present and reverting to a normal operation once the problems have been removed. With regard to claim 1, which further teaches (e) if said highly probable solution does not correct the fault condition, determining a further solution for correcting said fault condition in the connection, Cheng further teaches, in column 2, lines 55-59, the user being provided with additional steps (series of steps) if it is recognized that the problems haven't been removed yet. With regard to claim 1, which further teaches (f) displaying of the display device a further graphical depiction which illustrates said further solution, Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of further trouble shooting steps to a user.

4. With regard to claim 2, which teaches the fault condition being one of lack of connectivity, Cheng further teaches, in column 2, lines 43-45, the fault being the monitor not being properly connected to the video card.

5. With regard to claims 3 and 16, which teach detecting fault condition comprising detecting absence of a signal, Cheng further teaches, in column 1, lines 21-25 and column 2, lines 43-46, a fault condition of a monitor not being plugged in or not receiving a signal.

6. With regard to claim 4, which teaches detecting correction of the fault condition; and removing the graphical depiction when correction of the fault condition has been detected, Cheng further teaches, in column 2, lines 49-62, displaying a graphic

depiction of steps to remove the problems, and once the problems are resolved, displaying the normal data from the computer system.

7. With regard to claims 5 and 17, which teach the graphical depiction being one of static depiction and a animated depiction, Cheng further teaches, in column 2, line 64 through column 3, line 21, a static graphical depiction of fault correction assistance.

8. With regard to claim 6, which teaches the fault condition in the connection is a lack of a video signal received by the display device from the personal computer, Cheng further teaches, in column 1, lines 21-25, a fault condition of a monitor not being plugged in, and in column 3, lines 6-8, the signal being a video signal.

9. With regard to claim 13, which teaches an apparatus, comprising: (a) detecting means in a display device for detecting a fault connection in a signal receiving connection between video generating circuitry of said display device and a personal computer, Cheng teaches, detecting various faults (see column 2, lines 35-37 and 43-45) in a device which receives signals at a monitor from a connection to a video graphic adapter at a computer (see column 2, lines 9-23). With regard to claim 13, which further teaches (b) a controller in said display device coupled to said detecting means, Cheng teaches, in column 2, line 14 and figure 1, a controller in the monitor, connected to the interface for use in implementation of the system. With regard to claim 13, which further teaches (c) a memory in said display device coupled to said controller, Cheng teaches, in column 2, lines 14 and 15, a memory coupled to the controller. With regard to claim 13, which further teaches (d) wherein upon detection of a fault condition said detecting means, said controller is configured to: determine a highly probable solution for

correcting the fault condition, Cheng further teaches, in column 2, lines 35-62, the system determining a solution that is most appropriate to the recognized fault. With regard to claim 13, which further teaches determine an appropriate graphical depiction of said highly probable solution to aid a user, cause said graphical depiction to be displayed on said display device, Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps appropriate to the users fault to a user. With regard to claim 13, which further teaches if said detecting means detects said fault condition is present after display of said graphical description of said highly probable solution determine a further solution for correcting the fault condition, Cheng further teaches, in column 2, lines 60-62, the system determining if no more faults are present and reverting to a normal operation once the problems have been removed, and in column 2, lines 55-59, further teaches the user being provided with additional steps (series of steps) if it is recognized that the problems haven't been removed yet. With regard to claim 13, which further teaches determine a further graphical depiction which illustrates said further solution, which further teaches cause said further graphical depiction to be displayed on said display device, Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps appropriate to the users fault to a user.

10. With regard to claim 15, which teaches the detecting means including an interface capable of receiving an input from a user that instruction in necessary regarding activating a function of the apparatus, Cheng teaches, in column 2, lines 35-

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47 and lines 60-62, accepting user input on the UI to aid in activating normal function of the display.

11. With regard to claim 18, which teaches the graphical depiction being in color, Cheng teaches, in column 2, line 64 through column 3, line 222, the graphical depiction being in color.

12. With regard to claim 34, which teaches detecting of the fault condition includes detecting of an improper physical connection for the display device, Cheng teaches, in column 2, lines 43-59, the system detecting faults in a physical connection carrying electrical signals between the monitor and the video card.

13. With regard to claim 35, which teaches detecting of an improper electrical connection for the display device, Cheng teaches, in column 2, lines 43-59, the system detecting faults in a physical connection carrying electrical signals between the monitor and the video card.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 7, 20, 21, 23-27, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng and Kwon et al., Patent No.: US 7,043,691, hereafter Kwon.

16. With regard to claim 7, Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps to a user, however, doesn't specifically disclose the graphical depiction including a video signal cable being plugged into a device. Kwon teaches a systems in which a user is provided with a graphical depiction to alleviate connection problems (see column 1, lines 55-59), similar to that of Cheng, but further teaches providing a visual depiction to assist the user in connecting cables where the cables and connections are color-coded (see column 8, lines 17-21). It would have been obvious to one of ordinary skill in the art, having the teachings of Cheng and Kwon before him at the time the invention was made to modify the trouble-shooting system of Cheng to include the color-coded connection system of Kwon. One would have been motivated to make such a combination because this would help to further limit confusion of the user and minimize faults.

17. With regard to claim 20, which teaches an apparatus, comprising: (a) a housing including a display disposed within said housing, Cheng teaches, in column 2, lines 9-18, a monitor including device (10) and various display components. With regard to claim 20, which further teaches (b) a signal-receiving connector disposed on said housing, the signal-receiving connector being configured to receive signal from a device capable of generating and transmitting a signal through the connector, (c) means for detecting whether a proper electrical connection is not made with said connector, Cheng teaches detecting various faults (see column 2, lines 35-37 and 43-45) in a device which receives signals at a monitor from a connection to a video graphic adapter at a computer (see column 2, lines 9-23). With regard to claim 20, which further

teaches (d) means for displaying on the display a pictographical solution for providing a proper connection with said connector in the event that said detecting means detects that a proper connection is not made with said connector, Cheng teaches, in column 1, lines 22-26 and column 2, lines 43-46, determining if a proper connection is made and displaying a graphical depiction of a solution if not. With regard to claim 20, which further teaches the means for displaying being configured to: determine a highly probable solution for correcting the fault condition, determine an appropriate graphical depiction of said highly probable solution to aid a user, cause said graphical depiction to be displayed on said display device, Cheng further teaches, in column 2, lines 35-62, the system determining a solution that is most appropriate to the recognized fault, and further teaches in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps appropriate to the users fault to a user. With regard to claim 20, which further teaches if said detecting means detects said fault condition is present after display of said graphical description of said highly probable solution determine a further solution for correcting the fault condition, determine a further graphical depiction which illustrates said further solution and cause said further graphical depiction to be displayed on said display device, Cheng further teaches, in column 2, lines 60-62, the system determining if no more faults are present and reverting to a normal operation once the problems have been removed. Cheng further teaches, in column 2, lines 55-59, the user being provided with additional steps (series of steps) if it is recognized that the problems haven't been removed yet. Cheng further teaches, in column 4, lines 48-

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59, displaying on a monitor a graphical depiction of further trouble shooting steps to a user.

Cheng, however, doesn't specifically teach the graphical depiction being a pictographical solution. Kwon teaches a systems in which a user is provided with a graphical depiction to alleviate connection problems (see column 1, lines 55-59), similar to that of Cheng, but further teaches providing a pictographical solution to assist the user in connecting cables where the cables and connections are color-coded (see column 8, lines 17-21). It would have been obvious to one of ordinary skill in the art, having the teachings of Cheng and Kwon before him at the time the invention was made to modify the trouble-shooting system of Cheng to include the pictured connection help system of Kwon. One would have been motivated to make such a combination because this further aid in describing to a user how to correct a certain fault in the connection.

18. With regard to claim 21, which teaches means for displaying being capable of displaying a graphical depiction of the solution on the display, Cheng teaches, in column 2, lines 48-59, showing a graphical depiction of trouble shooting steps on the display screen.

19. With regard to claims 23, which teaches the housing being at least one of a monitor, a television, a computer, a personal digital assistant, a DVD player, a CD player, a digital storage medium player and a network device, Cheng teaches, in column 1, lines 38-42, the housing being a monitor's case.

20. With regard to claim 24, which teaches the means for displaying being disposed in a housing with the display, Cheng teaches, in column 2, lines 9-18, a monitor comprising a controller, a user interface, memory, etc.

21. With regard to claim 25, which teaches means for displaying further displaying a message indicating that a proper connection is made with the connector when the detecting means detects the proper connection is made with the connector, Cheng further teaches, in column 2, lines 60-63, a message in the self-diagnostic system indicating a normal status of the connection.

22. With regard to claim 26, which teaches an apparatus, comprising: (a) a housing including a display disposed within said housing, Cheng teaches, in column 2, lines 9-18, a monitor including device (10) and various display components. With regard to claim 26, which further teaches (b) a connector configured to receive a video signal for said display, said connector being disposed within said housing (c) means for detecting whether a proper electrical is not made with said connector such that said connector receives a video signal, Cheng teaches detecting various faults (see column 2, lines 35-37 and 43-45) in a device which receives signals at a monitor from a connection to a video graphic adapter at a computer (see column 2, lines 9-23). With regard to claim 26, which further teaches (d) means for displaying on the display a iconographical depiction for a user with a solution with which a user can cause a proper connection to be made with said connector to provide the video signal to said connector and said display, Cheng teaches, in column 1, lines 22-26 and column 2, lines 43-46, determining if a proper connection is made and displaying a graphical depiction of a

solution if not. With regard to claim 26, which further teaches the means for displaying being configured to: determine a highly probable solution for correcting the fault condition, determine an appropriate graphical depiction of said highly probable solution to aid a user, cause said graphical depiction to be displayed on said display device, Cheng further teaches, in column 2, lines 35-62, the system determining a solution that is most appropriate to the recognized fault, and further teaches in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps appropriate to the users fault to a user. With regard to claim 26, which further teaches if said detecting means detects said fault condition is present after display of said graphical description of said highly probable solution determine a further solution for correcting the fault condition, determine a further graphical depiction which illustrates said further solution and cause said further graphical depiction to be displayed on said display device, Cheng further teaches, in column 2, lines 60-62, the system determining if no more faults are present and reverting to a normal operation once the problems have been removed. Cheng further teaches, in column 2, lines 55-59, the user being provided with additional steps (series of steps) if it is recognized that the problems haven't been removed yet. Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of further trouble shooting steps to a user.

Cheng, however, doesn't specifically teach the graphical depiction being a iconographical depiction of a solution. Kwon teaches a systems in which a user is provided with a graphical depiction to alleviate connection problems (see column 1, lines 55-59), similar to that of Cheng, but further teaches providing icons in a

pictographical solution to assist the user in connecting cables where the cables and connections are color-coded (see column 8, lines 17-21). It would have been obvious to one of ordinary skill in the art, having the teachings of Cheng and Kwon before him at the time the invention was made to modify the trouble-shooting system of Cheng to include the icons in a pictographical solution help system of Kwon. One would have been motivated to make such a combination because this further aid in describing to a user how to correct a certain fault in the connection.

23. With regard to claim 27, which teaches means for displaying further displaying a message indicating that a proper connection is made with the connector when the detecting means detects the proper connection is made with the connector, Cheng further teaches, in column 2, lines 60-63, a message in the self-diagnostic system indicating a normal status of the connection.

24. With regard to claim 31, Cheng further teaches, in column 4, lines 48-59, displaying on a monitor a graphical depiction of trouble shooting steps to a user, however, doesn't specifically disclose the graphical depiction including non-textual description of the step. Kwon teaches a systems in which a user is provided with a graphical depiction to alleviate connection problems (see column 1, lines 55-59), similar to that of Cheng, but further teaches providing a picture depiction to assist the user in connecting cables where the cables and connections are color-coded (see column 8, lines 17-21). It would have been obvious to one of ordinary skill in the art, having the teachings of Cheng and Kwon before him at the time the invention was made to modify the trouble-shooting system of Cheng to include the picture connection system of Kwon.

One would have been motivated to make such a combination because this further aid in describing to a user how to correct a certain fault in the connection.

25. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng, Kwon, and Petty et al., Patent #6,546,263, hereinafter Petty.

26. With regard to claim 22, Cheng and Kwon teach a system for displaying solutions to issues in the computer system on the display, but don't specifically teach the solutions being animated on the display. Petty teaches a system for providing a visual representation of a plurality of faults/conditions that can be present on a system, similar to that of Cheng and Kwon, however, Petty further teaches, in column 3, line 54 through column 4, line 7 and in figure 1b, a icon that rotates through states to display a corresponding updated status of the system battery power (providing an indication of when to charge). It would have been obvious to one of ordinary skill in the art, having the teachings of Cheng, Kwon, and Petty before him at the time the invention was made to modify trouble-shooting system of Cheng and Kwon to include the animated depiction of the fault, as did Petty. One would have been motivated to make such a combination because this provides the user with a better representation of exactly how much time they have before they must charge the system.

Response to Arguments

27. The arguments filed on 5-16-2007 have been fully considered but they are not persuasive. Reasons set forth below.

28. Applicants have presented no arguments directed to the claims, only a general belief that the claims as amended overcome the prior art of record. To that the Examiner presents the Rejection supra.

Conclusion

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis G. Bonshock whose telephone number is (571) 272-4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in dark ink, appearing to be 'DGB', with a stylized, cursive script.

7-13-07
dgb

7-16-07